10056247 .012402

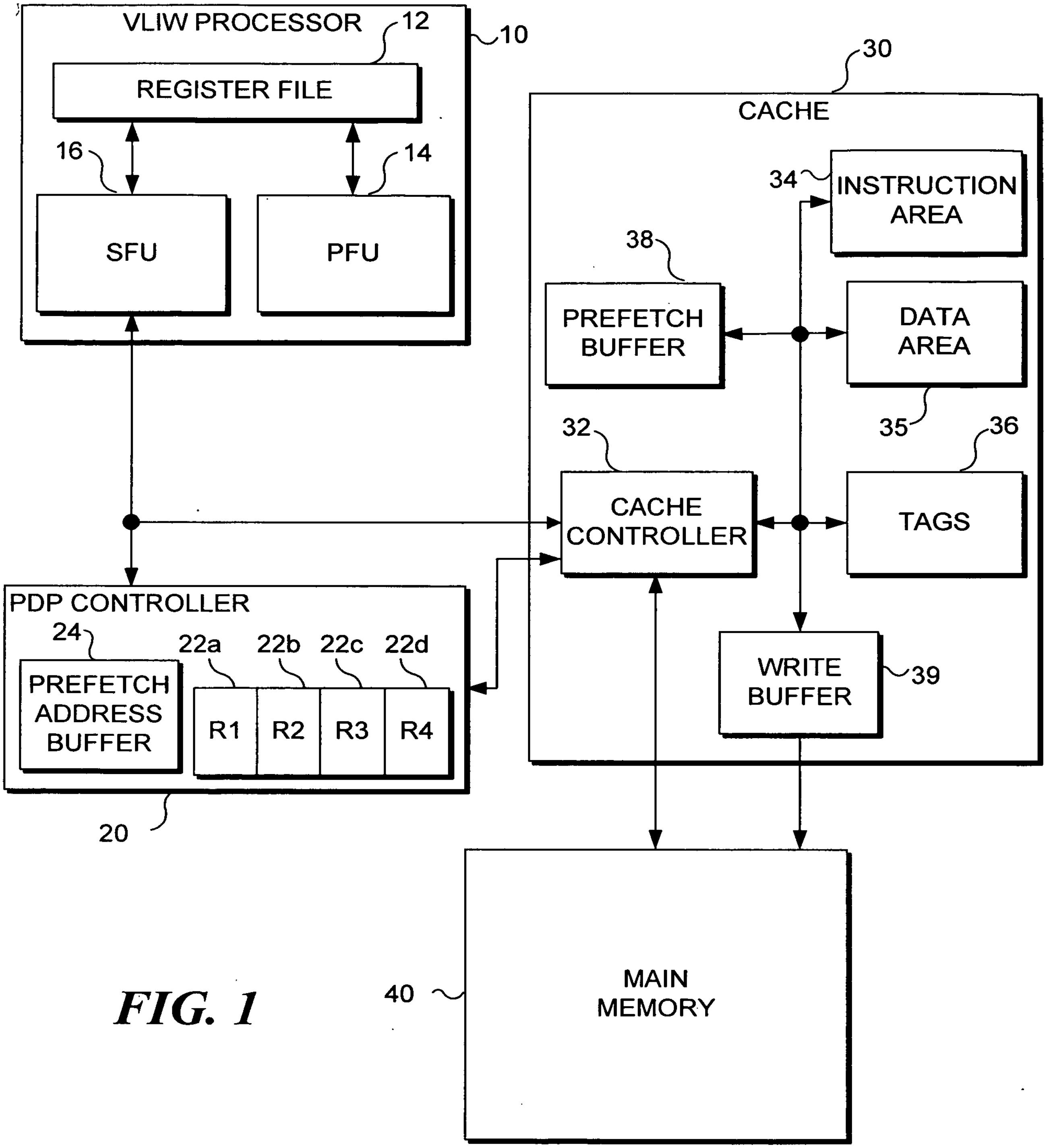

FIG. 1

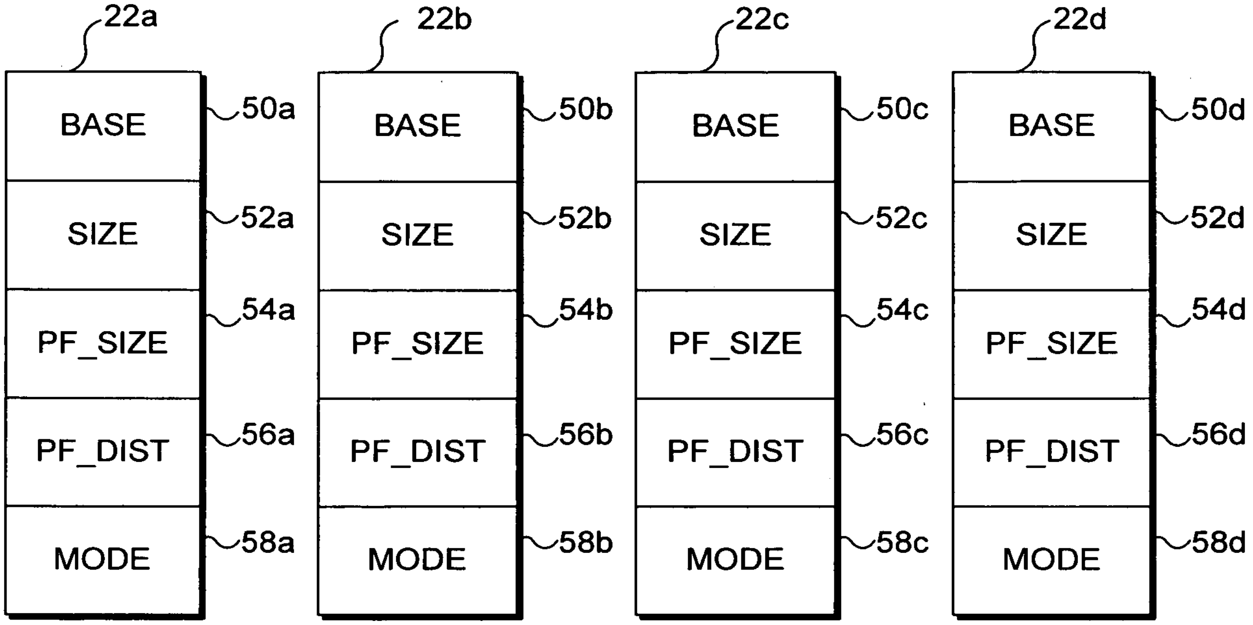

FIG. 2

10056247.012402

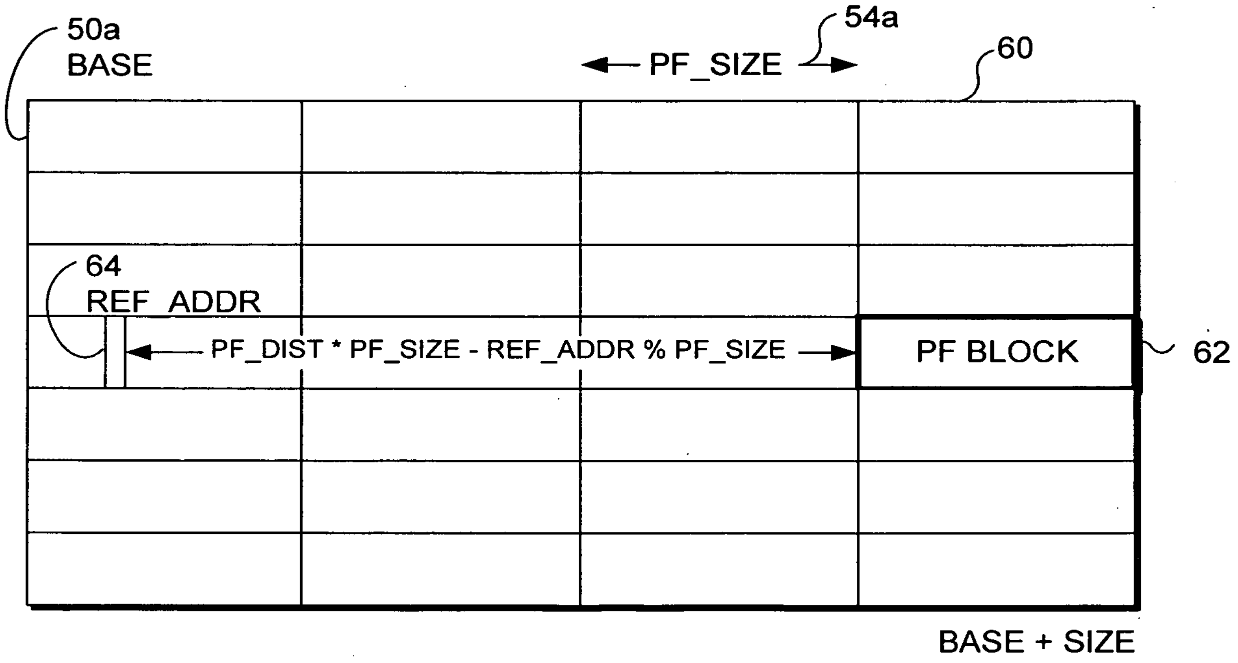

FIG. 3

10056247.012402

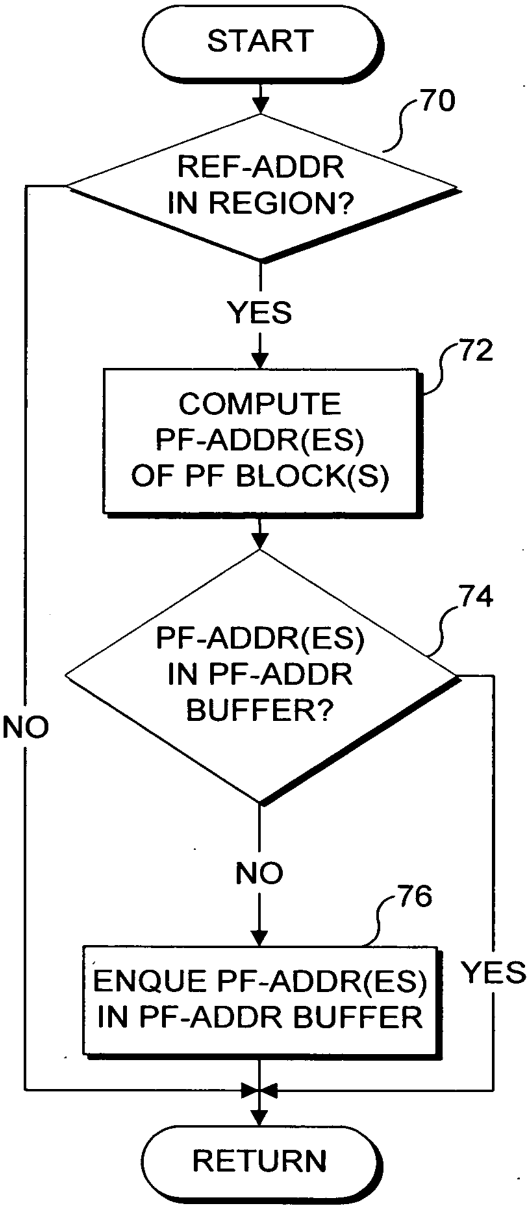
START
70
REF-ADDR IN REGION?
YES
NO
72
COMPUTE PF-ADDR(ES) OF PF BLOCK(S)
74
PF-ADDR(ES) IN PF-ADDR BUFFER?
NO
YES
76
ENQUE PF-ADDR(ES) IN PF-ADDR BUFFER
RETURN

FIG. 4A

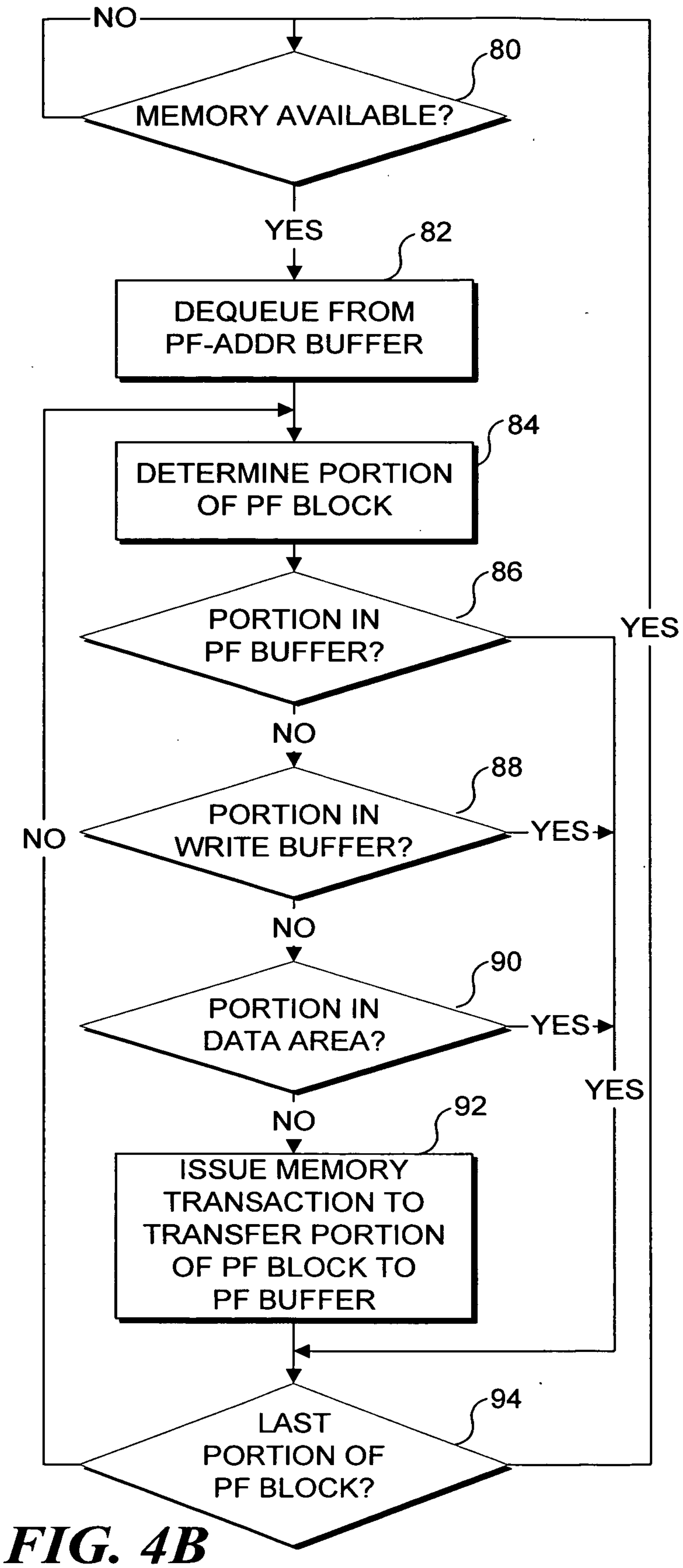
NO
80
MEMORY AVAILABLE?
YES
82
DEQUEUE FROM PF-ADDR BUFFER
84
DETERMINE PORTION OF PF BLOCK
86
PORTION IN PF BUFFER?
YES
NO
88
PORTION IN WRITE BUFFER?
YES
NO
NO
90
PORTION IN DATA AREA?
YES
YES
NO
92
ISSUE MEMORY TRANSACTION TO TRANSFER PORTION OF PF BLOCK TO PF BUFFER
94
LAST PORTION OF PF BLOCK?
YES

FIG. 4B

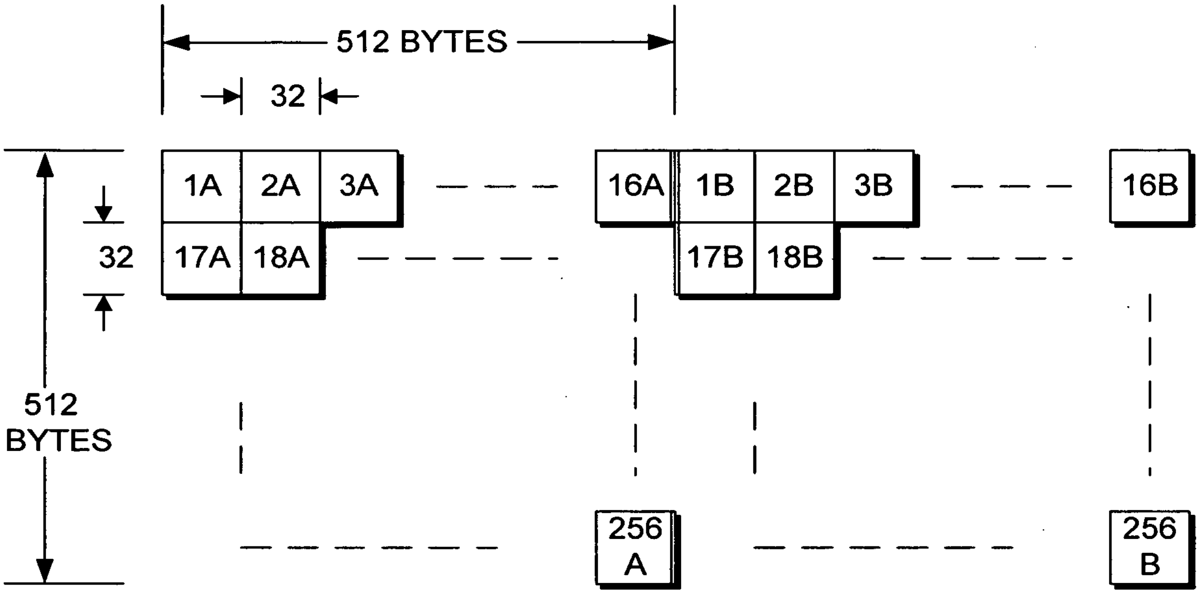

FIG. 5

10056247.012402

10056247.012402

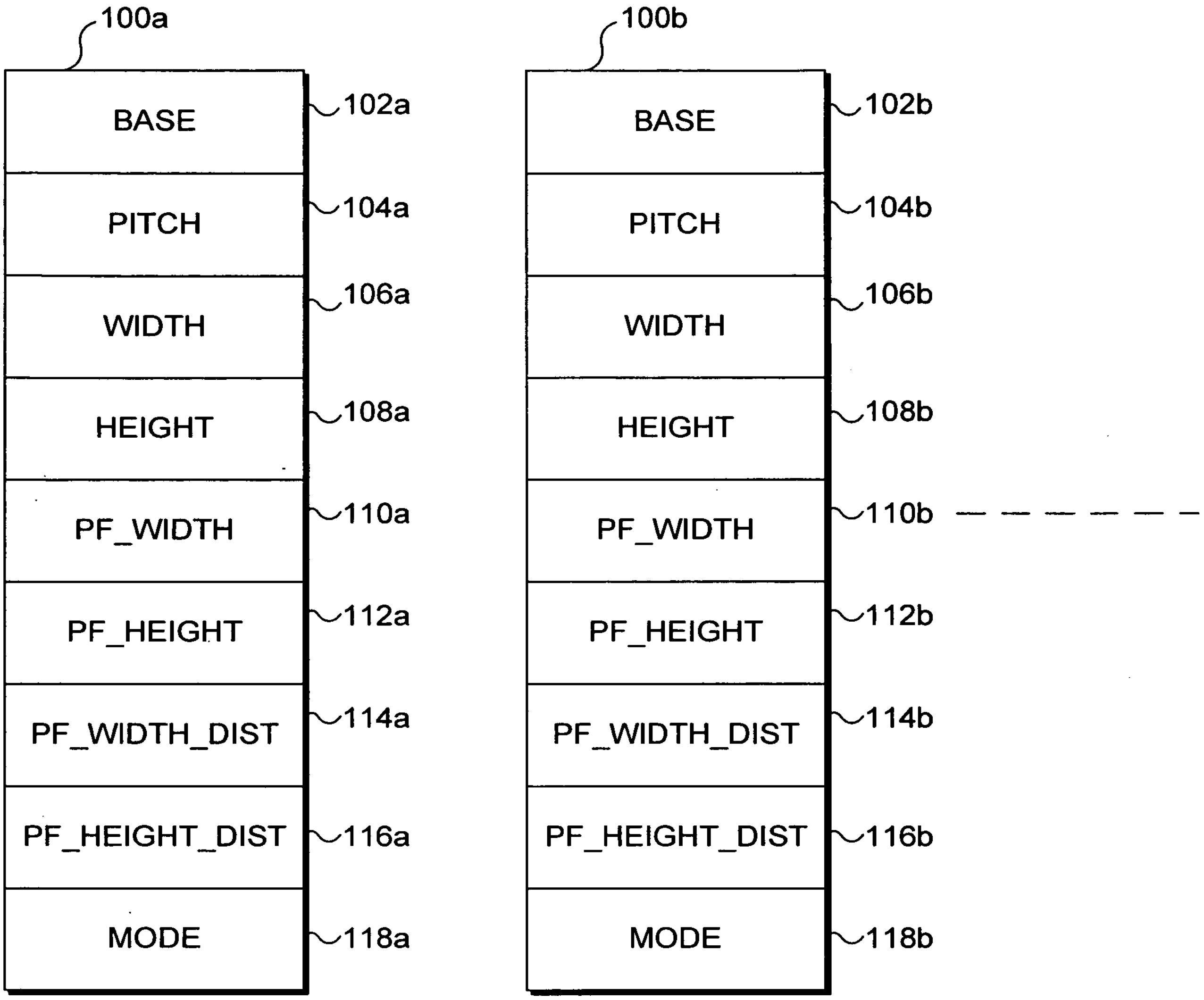

FIG. 6

10056247.012402

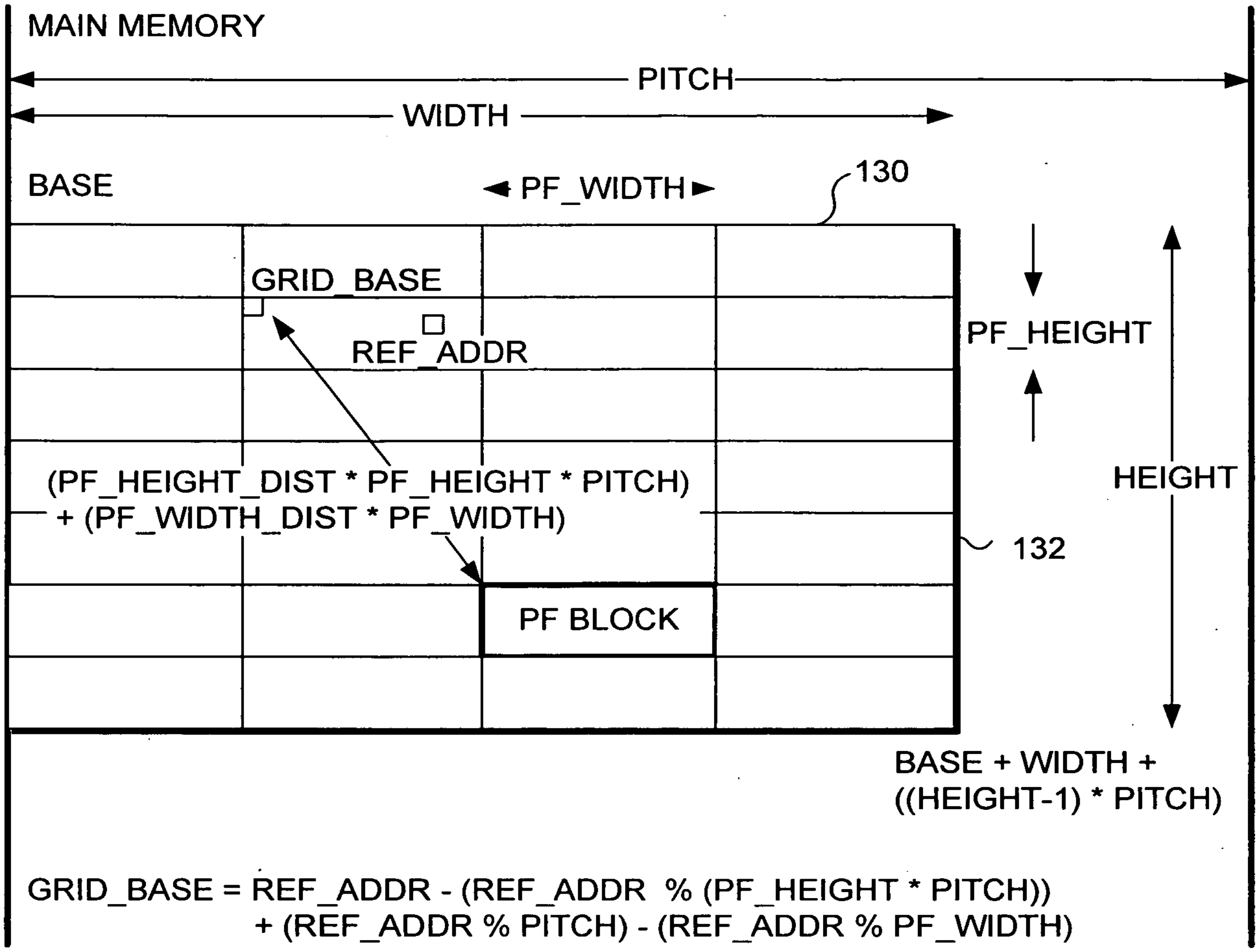
MAIN MEMORY
PITCH
WIDTH
BASE
PF_WIDTH
130
GRID_BASE
REF_ADDR
PF_HEIGHT
HEIGHT
(PF_HEIGHT_DIST * PF_HEIGHT * PITCH)
+ (PF_WIDTH_DIST * PF_WIDTH)
132
PF BLOCK
BASE + WIDTH +
((HEIGHT-1) * PITCH)
GRID_BASE = REF_ADDR - (REF_ADDR % (PF_HEIGHT * PITCH))
+ (REF_ADDR % PITCH) - (REF_ADDR % PF_WIDTH)

FIG. 7